

Among the dead birds there were two male specimens which were totally intact. It appeared that they had died not more than a few hours earlier, as their bodies had not shrunk, nor had they stiffened due to onset of Rigor mortis.

I got post mortems performed on both birds. One was an adult, the other a young bird. This proved that the birds did not die due to age. The birds weighed about 5 kg each. This proved that neither was sick, as sick birds are usually lighter in weight. The stomachs of both birds contained surprisingly large amounts (more than 2 litres) of water. This proved that the birds had become thirsty and drank a lot of water prior to death. The gizzard and stomach showed wheat grain and undifferentiated vegetable matter.

13. BELLY-SOAKING AND NEST WETTING BEHAVIOUR OF REDWATTLED LAPWING, *VANELLUS INDICUS* (BODDAERT)

Belly-soaking is done mainly to transport water to the nest with eggs or young ones, and has been observed in the Charadriiformes (Maclean 1975), and I had evidence (though without personal observation) that nesting Redwattled Lapwing, *Vanellus indicus*, regularly wetted their nests from the clay pellets formed by wetting, I never had the chance to actually observe this behaviour till this year (1986). On 11 April 1986 I saw a pair sitting on the banks of a lake and drinking. Suddenly, one of them started dipping its belly repeatedly into the water, and then took off. I knew that the bird was nesting nearby and taking water to the nest, but I could not follow the bird as it flew out of view. On April 25th I discovered a nest just on the banks of the lake. This gave me the opportunity to study the belly-soaking behaviour. On April 28th I positioned my camera at a vantage point and walked towards the nest to disturb the incubating bird. The bird quietly moved away from the nest. I quickly retreated to my position and waited for it to return. Soon the bird walked to the water and started to drink, then soaked its belly 3-4 times before walking back to the nest. I quickly went to the nest to examine the eggs; they were copiously drenched with water. The belly-soaking behaviour was not seen during the early hours of the day when the temperature was low. During the early hours the incubating bird was not very anxious to return to the nest in a rush after the intruder left; while during mid-day, when the tempera-

No tests were done to detect any evidence of organophosphorus in the tissue of these birds.

If the cause of death is accidental or deliberate poisoning from consumption of poisoned bait or crops sprayed with organophosphorus, it will be necessary to take steps to protect the cranes in the coming winter.

I would be interested in getting feedback on this note, particularly from naturalists who have been studying these cranes in the northern states. I would especially like to know if they had noticed similar deaths of these cranes after consuming crops sprayed with insecticides and whether there are any methods to detect organophosphorus in the dead birds.

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ture was high, it returned to the nest immediately. If the intruder stayed longer the bird appeared visibly agitated and walked towards the nest, pausing and retreating. This behaviour was repeated with weak vocalization.

On May 10th I saw 3 other birds, which were obviously nesting somewhere nearby, doing belly-soaking before taking off from the lake. During that time of the year this lake is the only source of water.

The incubating bird, once relieved by its partner, goes to the water, drinks several times and starts preening for a while (15-30 minutes) and then drinks again repeatedly. Just before taking off it does the belly-soaking 3-5 times. This observation was made several times on 4 birds.

On May 21st at about 1500 hrs I saw that two eggs had hatched. The parent birds repeatedly flew towards me noisily. As soon as I left the area one of them soaked its belly 3-4 times and went to the nest. I could clearly see through my binoculars the chicks drinking off the wet belly feathers of the parent before the parent sat to brood them.

Though belly-soaking has been reported by earlier observers (Dharmakumarsinhji 1964, Jayakar & Spurway 1965) I think that this is the first time that it has been photographed.

October 21, 1986.

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